

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for opening an integrated circuit fuse, the method comprising the steps of:

generating at least one opening to a fuse element that couples a plurality of terminals and is located in a non-last metal layer; and

wet etching the fuse element to open the fuse.
2. (Original) The method of claim 1, wherein the generating step includes:

applying a photoresist to define an opening area for each opening; and

etching to generate the at least one opening.
3. (Original) The method of claim 2, wherein the applying step includes:

depositing the photoresist;

exposing the photoresist using laser light; and

developing the photoresist to define the opening area for each opening.
4. (Original) The method of claim 3, wherein the generating step further includes removing the photoresist and a diffusion barrier on the fuse element.
5. (Original) The method of claim 1, wherein the generating step includes applying a

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polymer and ablating the polymer with a laser to define the at least one opening.

6. (Cancelled).
7. (Original) The method of claim 1, wherein the at least one opening includes one opening to each side of the plurality of terminals.
8. (Original) The method of claim 7, wherein the wet etching step removes the fuse element under the plurality of terminals.
9. (Original) The method of claim 1, wherein each terminal is fully-landed on a wire of the fuse element and includes a metal liner surrounding the terminal.
10. (Original) The method of claim 1, wherein the fuse element and each terminal include copper.
11. (Original) The method of claim 1, wherein the wet etchant includes at least one of sulfuric acid, aqueous ammonium persulfate, hydrogen peroxide and water.

12. (Original) An integrated circuit fuse comprising:
a plurality of terminals coupled by a fuse element;
wherein the fuse element is located in a non-last metal layer.
13. (Original) The integrated circuit fuse of claim 12, wherein the fuse element includes a wire and each terminal is fully-landed on the wire.
14. (Original) The integrated circuit fuse of claim 12, wherein each terminal includes a metal liner.
15. (Original) The integrated circuit fuse of claim 14, wherein the metal liner includes one of tantalum, tungsten and titanium nitride.
16. (Original) The integrated circuit fuse of claim 12, wherein the fuse element and each terminal include copper.
17. (Original) The integrated circuit fuse of claim 12, wherein each terminal includes a horizontal wire and a vertical stud, and the fuse element includes a wire that couples the vertical studs.
18. (Original) The integrated circuit fuse of claim 12, wherein a first terminal includes a horizontal wire and a terminal vertical stud, a second terminal includes a horizontal wire,

and the fuse element includes a wire coupled to the vertical stud and a fuse vertical stud coupled to the horizontal wire of the second terminal.

19. (Original) An integrated circuit comprising:
 - a fuse including a plurality of terminals coupled by a fuse element;
 - wherein the fuse element is located in a non-last metal layer.
20. (Original) The integrated circuit of claim 19, wherein each terminal is fully-landed on a wire of the fuse element.
21. (Original) The integrated circuit of claim 19, wherein each terminal includes a metal liner.
22. (Original) The integrated circuit of claim 21, wherein the metal liner includes one of tantalum, tungsten and titanium nitride.
23. (Original) The integrated circuit of claim 19, wherein the fuse element and each terminal include copper.
24. (Original) The integrated circuit of claim 19, wherein each terminal includes a horizontal wire and a vertical stud, and the fuse element includes a wire that couples the vertical studs.

25. (Original) The integrated circuit of claim 19, wherein the fuse element includes a horizontal wire coupled to a terminal vertical stud of a first terminal and a fuse vertical stud coupled to a horizontal wire of a second terminal.
26. (Currently Amended) An integrated circuit fuse comprising:
a plurality of terminals coupled by a fuse element;
wherein each terminal is fully-landed on an upper surface of a wire of the fuse element.
27. (Original) The integrated circuit fuse of claim 26, wherein each terminal includes a metal liner including one of tantalum, tungsten and titanium nitride.
28. (Original) The integrated circuit fuse of claim 26, wherein each terminal includes a horizontal wire and a vertical stud, and the fuse element includes a wire that couples the vertical studs.
29. (Original) The integrated circuit fuse of claim 26, wherein a first terminal includes a horizontal wire and a terminal vertical stud, a second terminal includes a horizontal wire, and the fuse element includes a wire coupled to the vertical stud and a fuse vertical stud coupled to the horizontal wire of the second terminal.

30. (Original) An integrated circuit comprising:

an opened fuse area including a metal liner of a fuse element, the fuse element having been removed to generate the opened fuse area, the metal liner being intact immediately adjacent to, and in non-contact, with a plurality of terminals.